

ABSTRACT OF THE DISCLOSURE

A calcium phosphate-synthetic resin-metal composite body produced by pressing a metal member, calcium phosphate particles (or calcium phosphate particles and a calcium phosphate block) and synthetic resin particles I, which are at least partially cross-linked in advance, uncross-linked, synthetic resin particles II while heating, the calcium phosphate particles and/or the calcium phosphate block being exposed on at least part of the surface of the composite body. It is produced by (a) introducing a metal member, calcium phosphate particles (or calcium phosphate particles and calcium phosphate block), and synthetic resin particles I and II into a cavity of a molding die such that the synthetic resin particles surround the calcium phosphate particles, and that the calcium phosphate block, if any, is exposed on at least part of the composite body surface; and (b) pressing them in the molding die cavity while heating, so that the synthetic resin particles are bonded to the metal member and the calcium phosphate particles (or the calcium phosphate particles and the calcium phosphate block).